

ENVIRONMENTAL, SAFETY, HEALTH & QUALITY DIRECTORATE INFORMATION BULLETIN

BROOKHAVEN NATIONAL LAB

DECEMBER 2003

When the Snow Flies....



The Federal Emergency Management Administration has some helpful facts and tips for winter driving: The leading cause of death during winter storms is transportation accidents. Preparing your vehicle for the winter season and knowing how to react if stranded or lost on the road are the keys to safe winter driving.

Before:

Have a mechanic check the following items on your car:

- Battery
- Defroster
- Antifreeze
- Ignition system
- Lights
- Wipers and windshield washer fluid
- Oil level (if necessary, replace existing oil with a winter grade oil or the SE 10w/30 weight variety)
- Flashing hazard lights
- Thermostat
- Exhaust system
- Heater
- Brakes

Install good winter tires. Make sure the tires have adequate tread. All-weather radials are usually adequate for most winter conditions.

Plan long trips carefully. Listen to the radio or call the state highway patrol for the latest road conditions. Always travel during daylight and, if possible, take at least one other person.

A **winter storm watch** indicates that severe winter weather may affect your area. A winter storm warning indicates that severe winter weather conditions are definitely on the way. A **blizzard warning** means that large amounts of falling or blowing snow and sustained winds of at least 35 miles per hour are expected for several hours.

Dress warmly. Wear layers of loose-fitting, layered, lightweight clothing.

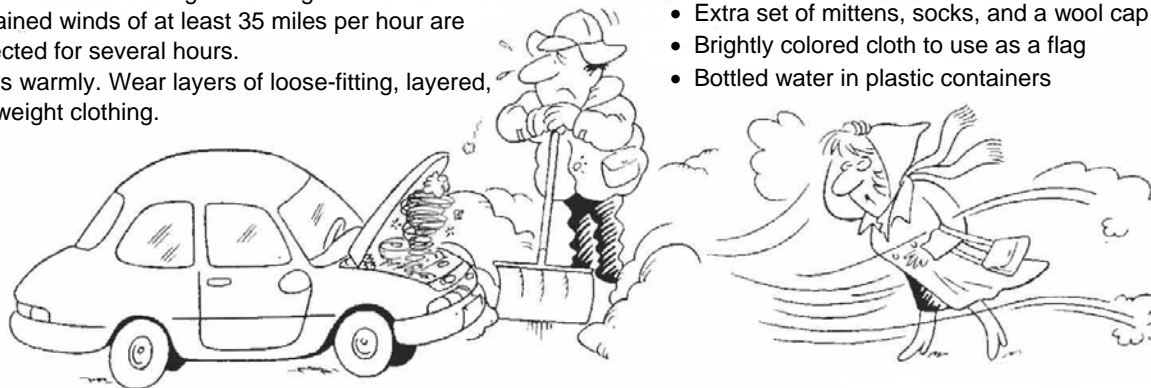
In your Automobile

Keep your gas tank near full to avoid ice in the tank and fuel lines.

Let people know where you are going and estimated times of arrival.

Carry a Winter Storm Survival Safety Kit. This is what should be in the kit:

- Blankets and sleeping bags
- Shovel
- Flashlight with extra batteries
- Sack of sand or cat litter
- First-aid kit
- Windshield scraper and brush
- Knife
- Tow Rope
- High calorie, no perishable food
- Extra clothing to keep dry
- Water container
- Booster cables
- Tire chains
- Compass and road maps
- Necessary medications
- Non-electric can opener
- Candles
- Large empty can and plastic cover with tissues and paper for sanitary purposes
- Small can which may be used for melting drinking water
- Coffee can with waterproof matches to make a fire. You would be surprised how much heat can be produced from this.
- Tool kit (small tools like pliers, wrench, screwdriver).
- Extra set of mittens, socks, and a wool cap
- Brightly colored cloth to use as a flag
- Bottled water in plastic containers



If trapped in your car during a Blizzard:

STAY IN THE CAR!

Do not leave the car if visibility is less than 100 yards. You may become disoriented and lost in blowing and drifting snow. Display a trouble sign. Hang a brightly colored cloth on the radio antenna and raise the hood.

Occasionally run engine to keep warm. Turn on the car's engine for about 10 minutes each hour. Run the heater when the car is running. Also, turn on the car's dome light when the car is running

Beware of carbon monoxide poisoning. Keep the exhaust pipe clear of snow and open a downwind window slightly for ventilation.

Watch for signs of frostbite and hypothermia. Do minor exercise to keep up circulation. Clap hands and move arms and legs occasionally. Try not to stay in one position for too long. If more than one person is in the car, take turns sleeping. For warmth, huddle together. Use newspapers, maps, and even the removable car mats for added insulation.

Avoid overexertion. Cold weather puts an added strain on the heart. Unaccustomed exercise such as shoveling snow or pushing a car can bring on a heart attack or make other medical conditions worse. Be aware of symptoms of dehydration.

"Wind chill" is a calculation of the effects on unprotected skin when temperature and wind speed are combined. A strong wind combined with a temperature of just below freezing can have the same effect as a still air temperature about 35 degrees colder.

Cellular phones have become easily available and are highly recommended for winter trips.

Frostbite is a severe reaction to cold exposure that can permanently damage its victims. A loss of feeling and a white or pale appearance in fingers, toes, or nose and ear lobes are symptoms of frostbite.

Hypothermia is a condition brought on when the body temperature drops to less than 55 degrees Fahrenheit. Symptoms of hypothermia include uncontrollable shivering, slow speech, memory lapses, frequent stumbling, drowsiness, and exhaustion.

If frostbite or hypothermia is suspected, begin warming the person slowly and seek immediate medical assistance. Warm the person's trunk first. Use your own body heat to help. Arms and legs should be warmed last because stimulation of the limbs can drive cold blood toward the heart and lead to heart failure. Put person in dry clothing and wrap their entire body in a blanket. Never give a frostbite or hypothermia victim caffeine drinks (like coffee or tea) or alcohol. Caffeine, a stimulant, can cause the heart to beat faster and hasten the effects the cold has on the body. Alcohol, a depressant, can slow the heart and hasten the ill effects of cold body temperatures.

BNL Weather:

BNL has its own Meteorology Office (Environmental Sciences Dept/Earth Systems Science Division) that may be accessed by calling 2263 on-site or 344-2263 off-site. A taped message by Meteorologist Victor Cassella will give you the forecast for that day, evening, the next day and a five-day forecast. The taped message is available at 0900 and updated at 1500. The forecast only applies to the BNL site. During severe weather such as a severe winter storm or hurricane, updates will be given every three hours.

BNL has a General Information number to call if you feel the weather conditions may close the lab operations during a winter storm. The number is 344-INFO (4636). Information may also be obtained at www.bnl.hotline.gov.

Contact the FEMA homepage with links on the net for additional information, <http://www.fema.gov/>